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Using documentary photography to promote World War II occupational health policy

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Abstract. This paper represents research of vintage 1941 photographs and negatives discovered at the National Institute for Occupational Safety and Health (NIOSH) in 1988. These photographs were made by a noted American photographer John Collier, Jr. (1913–1992) during his 1st year as a photographer for the Farm Security Administration (FSA), a New Deal federal agency. The authors' documentation and interpretation of these photographs is based on research of archival records in the National Archives and Records Administration, the Archives of American Art, and the National Library of Medicine.

The authors explore how the US Public Health Service used documentary photography in the World War II era to produce educational materials promoting industrial hygiene. It examines the Public Health Service view of industrial health in light of past New Deal policy and programs, and the emerging war agenda as the USA prepared to enter World War II. The photographer's letters written at the time of the assignment illustrate the bureaucratic problems occurring when a federal occupational health agency conducted an industry survey while industrial health was under corporate and individual states' control. The photographs taken during this assignment, together with their original captions, give glimpses of workers and work of that era and reveal many of the occupational health and industrial hygiene practices of the time. Research of this 1941 photographic assignment sheds light on the vision and skill of its creators, FSA photographer John Collier and Elizabeth Pritchard, a high-level information specialist of the US Public Health Service.

Keywords: Elizabeth Pritchard, Farm Security Administration, industrial nursing, industrial hygiene history, John Collier, Jr., Public Health Service.

Background to the photographic assignment

In September 1941, Farm Security Administration (FSA) photographer John Collier, Jr. was sent on a contract assignment to the Division of Industrial Hygiene of the United States Public Health Service (PHS) to photograph small industries in the state of Connecticut. This assignment was under the direction of Elizabeth Pritchard, who was recently assigned to the Division from the head office of the PHS, the Office of the Surgeon General, "for the development, production, and promotion of industrial hygiene educational activities for the industrial worker and the general public" [1]. Arrangements to enter the industrial plants were to be made by the Connecticut State Department of Industrial

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Hygiene. Collier's boss, Roy Stryker, head of the FSA Historical Section, which housed the now renowned New Deal era photography activity, cautioned Collier in a letter of 10 September, "Unfortunately, you are going to have one of the Public Health people at your elbow, who will remember virtually every shot you took".

The PHS began to contract Farm Security Administration photographers "to build up our photographic files" for health education programs in 1938, according to a letter that year from the Surgeon General to an FSA administrator. Like other federal agencies doing this, PHS was charged by FSA for the services and expenses of its photographers and for negative processing and printing. The contracting agency retained the negatives and prints it desired. This arrangement brought needed money to the FSA and supplied several federal agencies with the high quality photographs they wanted. Stryker's comment above was part of his instructions to Collier, who was new in the agency, on being judicious in the amount of film he shot for this and other contract assignments. It also reveals, as he had on other occasions to his photographers, his less than complimentary feelings toward PHS as contractors of his photographers (see [2]). Interestingly, on 11 September, before Collier would have received Stryker's letter, Collier wrote to him stating that he found Mrs Pritchard "cooperative in every way".

The beginning of the PHS Industrial Hygiene Division educational efforts is documented in an internal memorandum of 20 August 1940. It outlined a plan "to clarify in the minds of the layman what is meant by industrial hygiene" in a way that "presents the obligations of the employer as well as employees". This plan emerged at the same time that industrial production for the military was escalating prior to the USA's entry into World War II. Many plants in the USA were running three work shifts. Approximately two-thirds of workers were working in small plants, many of which had retooled to produce metal parts, hardware, and other goods for the military under government contracts. The Industrial Hygiene Division estimated that small plants had approximately one-third more accidents than larger plants. Collier and Pritchard were slated to visit several of these re-engineered small factories in addition to traditional small New England industries like felt hat manufacturing and dye works (Fig. 1).

PHS occupational health goals and the USA's war agenda

By 1941, the PHS had been given sole authority among federal agencies to manage civilian industrial hygiene programs. However, this authority was limited, due to a lack of enforcement capabilities and the traditionally nonconfrontational stance regarding workplace health and safety of the PHS. During World War II, the PHS only had authority to actually direct worker health programs in government-run ordnance plants.

Because statistics showed that the worker absenteeism that slowed industrial production was due largely to nonoccupational causes, promoting the general health of workers continued to be the central focus of PHS industrial hygiene.

Fig. 1. Women sorting bullets in Connecticut small metal parts factory. Photo by John Collier, 1941. PH2946, NIOSH Collection of Historic Photographs.

The Industrial Hygiene Division began in 1912 as a way of broadening PHS efforts to investigate and control the spread of infectious diseases. Rosner and Markowitz characterize this focus of the first several decades of the 20th century, "many public health workers believed that any future progress in the control of tuberculosis, pneumonia, and other lung disorders, for instance, demanded that attention be paid to the work environment as well as to the home environment" [3]. Throughout the Depression and the New Deal, general public health education programs of the PHS were successful in improving mortality and morbidity statistics for infectious diseases and many other health conditions [4]. Now, as greater numbers of Americans were working as the USA edged to the brink of entry into the World War II, the PHS saw their workplace authority as a way to reach large numbers of people and their families with information that could improve health.

The PHS Division of Industrial Hygiene and the Division of Sanitary Reports and Statistics viewed occupational illness and injury as medical problems to solve through science. Dramatically increased funds in the years leading up to World War II brought into PHS ranks many new occupational physicians, industrial

hygienists, and sanitary engineers who were eager to put their research skills to use. The PHS took the position that its role in industrial health improvement was to conduct research and disseminate information about industrial disease and injury rather than to advocate or force change. Additionally, since occupational health professionals depended on voluntary owner permission to enter workplaces to conduct studies, they did not favor policy or actions that could jeopardize this [5]. The scope of PHS responsibility for wartime industrial health was also influenced by the American Medical Association (AMA) recommendation in a July 1941 Federal Security Agency (the parent agency of PHS), subcommittee meeting. The AMA stated that the PHS role should be to "instruct management in the advantages of medical supervision of workers".

The result of these factors was that, during the war, PHS provided technical assistance and support to industry and to state labor and health departments concerning workers safety and health. Its main avenue for doing this was through the introduction of information and persuasive materials for industry clinics and for workers, (directly and through unions, when they existed). Elizabeth Pritchard, who had proven her communication capabilities as speech writer to Surgeon General Thomas Parran, was chosen to develop and conduct this prominent function.

Even before the USA entered World War II, ever-increasing production for the war effort was mandated in industry, for the USA's strategy was to win the war by exceeding the production of their enemy. While continual increases in production were impossible without a large, healthy workforce, heavy production demands, especially when made of the new, inexperienced workers who were swelling employee ranks, could easily result in health and safety problems. In an unpublished typescript of 1941 or 1942, Pritchard seemed to both ignore this contradiction in writing, "industrial hygiene is the science of keeping the country's army in overalls safe and at top efficiency", and acknowledge it in stating, "the sudden aggregation of thousands of new workers in a defense area increases the industrial hygiene problem". The photographs made on this assignment and the accompanying written material reveal multiple and sometimes contradictory PHS stances toward workplace health and safety when peak production was required.

The federal occupational health strategy

The September 1941 photographic assignment provides glimpses of problems inherent to the approach, whereby a federal agency provided assistance to industrial management and individual states which controlled occupational health programs. John Collier reported to Roy Stryker in a letter that week that during the first day he "took a series on casting, pouring metal, followed with shower and washroom pix". He also revealed the assignment's bureaucratic snags: "I was told to stay in the car while Mrs Pritchard and State Health men went in for clearance...It seems no arrangement had been made at all by the Hartford

office, and New Departure would have none of us...But we did get in to their hospital and took all manner of dressing pictures including worker with a stroke...". Later in the letter he wrote, "...again no arrangements were made so we could not enter plant...I have never seen such beating around the bushes, shuffling of feet over the direct problem of getting in a plant and getting pictures..." [6]. In another letter, Collier revealed "...when the occasion arose when Mrs Pritchard and I were in a tight spot to get a picture, our local representative sold out on us, rushing up with the company man evidently greatly relieved at an opportunity to make clear to the local industrialist "that this investigation was not his idea" [7]. Collier probably perceived correctly in writing that day, "...the state office here...had a definite resentment about the picture program...Just something thrust upon them by the Washington gang". He was witnessing the tension between state and federal public health agencies, which competed for policy authority and money. This tension was part of larger bureaucratic and ideological struggles between and within state and federal public health and labor departments and agencies of that era [8].

Despite restrictions that the "State Health man" tried to impose on the photographer when he was finally allowed to photograph, Collier was able to write, "I took pictures like I always do and the workers had a picnic". There are many images where men and women gaze forward and appear relaxed and even a little amused. It seems that Collier won the confidence of the workers despite the trying and tense circumstances. The lack of access onto some of the factory floors resulted in as much coverage of plant clinics and shower rooms as of production areas (Fig. 2).

An original view of workers and work in the World War II era

Elizabeth Pritchard elaborated on the "sudden aggregation of thousands of new workers" in a later writing, noting the presence in the workplace of women, below draft age workers, older workers, disabled workers, the increase of dangerous work such as work with munitions, and the problems stemming from increased masses in industrial facilities. Collier's photographs show many of these circumstances. The photographs also show how and to what extent personal protective equipment, such as dust masks among fur cutters or leg protectors and safety shoes among foundry workers, were used on those particular days, and we see clearly what engineering controls were in place and how they were operating. The photograph captions provide insight into the PHS stance on the presence or absence of safety practices and equipment.

The hat-making photographs reveal that most of the men and women were dark haired and probably of Mediterranean heritage, as was traditional in that industry in the USA. Some probably did not have English as a first language. These were among the workers that the PHS specifically sought to reach with education materials; those skilled in their trade yet without high literacy skills. Through the photographs, these workers became the models in the publications

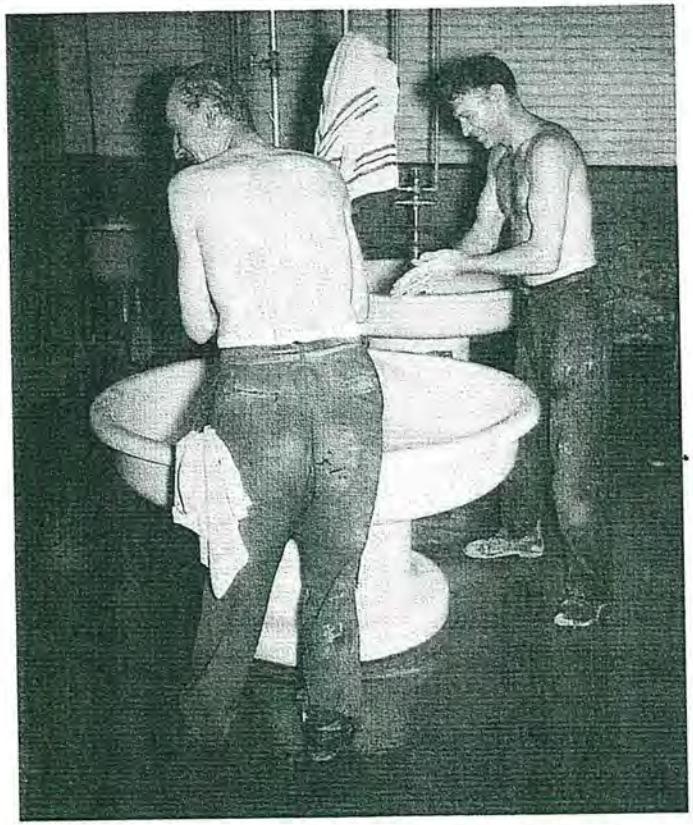

Fig. 2. Foundry men washing up after work. Photo by John Collier, 1941. PH3050, NIOSH Collection of Historic Photographs.

for which they were also the intended audience.

In a letter of 16 September, a week after the assignment, Collier mused about the people he had photographed, "the only part of the coverage that looked thin was the workmen themselves...Only rarely do workmen look like what the symbolic workman is supposed to look like...None of that grim stuff, many are kids or nice looking old men with white hair...". Collier's photographs bear out his thoughts in depicting workers in nonheroic, nonstereotypical ways. They are informative as human documents and as vignettes of occupational health history (Figs. 3 and 4).

Fig. 3. Woman with bandaged hand cutting rabbit pelts for felt hat making. Photo by John Collier, 1941. PH2977, NIOSH Collection of Historic Photographs.

A tall order for industrial nurses

These pictures of workers on the job and in industry clinics show much about the nature of occupational health practice in the World War II era. They often center on the industrial nurse. Pritchard wrote of the industrial nurse in the published materials resulting from this assignment, "She is in a strategic position to enlist the cooperation of both employer and employee, not only in the prevention and control of disease arising out of occupation, but also in promotion of general health and mental well being. One of the nurses responsibilities is to become thoroughly familiar with the industrial process in the plant, the occupational hazards, and the methods in use for their control" [9]. This echoes writings in

Fig. 4. Men wetting and rolling felt for hat making. Photo by John Collier, 1941. PH2965, NIOSH Collection of Historic Photographs.

industrial nursing literature of the time. An industrial nursing journal article written by Connecticut nurses additionally noted that objectives of industrial nursing service were "to reduce hidden production costs and avoidable labor turnover caused by accident and illness", and, "to promote harmonious relationships between employer and employee" [10].

These expectations, again stemming from the requirement to serve both health and safety and peak production demands, were a tall, if not impossible, order for nurses in industry clinics. The typical industrial nurse had organized and now managed a clinic that was visited by a physician one or more times a week. Some nurses also worked on production lines. The extent and nature of their responsibilities must have stretched their time and energies to the utmost. Their knowledge of good occupational health theory and practice could not always have been optimal. However, since companies were not required to engineer processes to eliminate or reduce known hazards, responsibility for worker safety and health fell, by default, on the nurse and on the worker. Knowingly or not, the PHS advocated this through a "common-sense" type of approach to occupational health in its war era writings, typified by this banner heading in the Industrial Hygiene Education Materials: "Good housekeeping is rule 1-A for the control of occupational hazards" (Fig. 5).

Fig. 5. Industrial nurse and physician examining worker's arm in factory clinic. Photo by John Collier, 1941. PH2952, NIOSH Collection of Historic Photographs.

Idealism and skill of Collier and Pritchard

John Collier, from Western USA, was a painter before he was a photographer. Several renowned artists were among his family's friends. His father, John Collier, Sr., was the progressive head of the U.S. Bureau of Indian Affairs who worked for a return to India's self–governance. In 1941, John Collier, Jr. was struggling in his photography to attain the FSA objective of making strong visual portrayals of the personal, social and cultural elements of subject matter. Elizabeth Pritchard was a Radcliffe-educated Southerner who had worked in the New York theater. After a car accident, she began work in Washington with the PHS and quickly rose in responsibility, writing and editing as an Information Specialist.

Together, Collier and Pritchard brought intense commitment and a wealth of talent to their assignment. Pritchard's flexible management of the assignment allowed for the input Collier offered and enabled her craft to broad, general state-

ments from the particular situations they encountered in the plants. Her writing, idealistic in its wholehearted service to the directive of plant safety and top efficiency through common sense practices, is nonetheless a creative weaving of information and picture sequences from the photographs Collier made. Collier's nonidealized images of workers offer wry, sometimes unusual, glimpses of the World War II era workplace. Although the conditions he depicted are often harsh, his photographs are empathetic and almost gentle, and one never mistakes the worker for the machine (Fig. 6).

Conclusion

Throughout his life, John Collier, Jr. photographed people and their working and living environments for notable government, corporate, and independent projects. He is also known for his contributions to the field of visual anthropology. These photographs are important for their place in his body of work. They are also important as unique examples of late New Deal documentary photography, made just before more proscribed images were demanded for the war effort. Research of the photographs through textual records and publications of the time documents the images and brings to light glimpses of the occupational health practice, theory, and politics of the era. While providing context and some insights, this research poses new, intriguing questions about the effects the Industrial Hygiene Education Materials may have had, the legacy of the PHS Industrial Hygiene Division to future federal occupational health scientists, and the feasibility of incorporating documentary photography into workplace safety and health research.

Fig. 6. Women packaging bullets on production line where plant nurse worked half-time. Photo by John Collier, 1941. PH2996, NIOSH Collection of Historic Photographs.

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